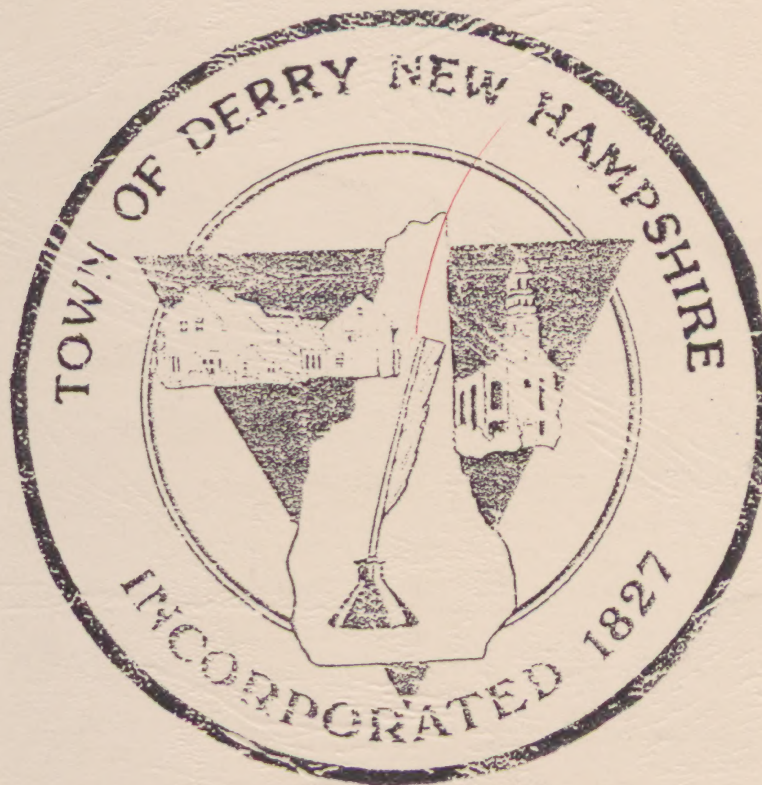


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TOWN OF DERRY
New Hampshire

LAND DEVELOPMENT
CONTROL REGULATIONS



Derry Planning Board

October 9, 1996

See updated copy 8/15/01

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LAND DEVELOPMENT CONTROL REGULATIONS

OCTOBER 9, 1996

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|-----------------------|--|--------------------|
| ADOPTED | August 16, 1960 | |
| AMENDED | August 11, 1966 January 11 & 18, 1972 | |
| RE-ADOPTED | December 17, 1984 | |
| REVISED | April 22, 1987 | June 8, 1988 |
| | October 28, 1987 | April 26, 1989 |
| | November 18, 1987 | June 20, 1990 |
| | March 23, 1988 | May, 1991 |
| | April 13, 1988 | September 25, 1991 |
| SITE PLAN REGULATIONS | ADOPTED | October 28, 1985 |
| | EFFECTIVE | November 1, 1985 |
| | REVISED | April 26, 1989 |
| | | November 15, 1989 |

LAND DEVELOPMENT CONTROL REGULATIONS

| | |
|--------------------|---|
| September 25, 1991 | Section III-H Approval Paragraph 7, added. |
| January 19, 1993 | Section III-J Waiver Req. (para 2 added) Section IV, A.2 Flood Ins. Req. amended |
| September 29, 1993 | Part 1, Section I-Authority, B-Site Plan Building Official replaced by PB. |
| May 25, 1994 | Delete reference to 1/3 reduction of lots serviced by a Community Well from Part 2-Design Requirements, Section V- Lots, C3d-Minimum Lot Sizes in its entirety and from the Lot Size by Soil Calculation Form. |
| October 9, 1996 | Add new section XIII - Fire Protection Definitions - Municipal Wastewater System & Municipal Water Supply |

PART 1 - SUBDIVISION OF LAND AND SITE PLANS

I. AUTHORITY

A. SUBDIVISION OF LAND

Pursuant to the authority vested in the Derry Planning Board by the voters of the Town of Derry and in accordance with the provisions of New Hampshire RSA 674:35-42, the Derry Planning Board adopts the following regulations governing the subdivision of land in the Town of Derry, New Hampshire.

Chapter 676:16, New Hampshire Revised Statutes Annotated
PENALTIES FOR TRANSFERRING LOTS IN UNAPPROVED SUBDIVISIONS.

Whoever, being the owner or agent of any land located within a subdivision, transfers or sells, or agrees to sell, or negotiates to sell, any land by reference to, or exhibition of, or by other use of a plat of a subdivision, before such plat has been approved by the Planning Board and recorded or filed in the office of the appropriate Register of Deeds, shall forfeit and pay a penalty of One Hundred Dollars (\$100.00) for each lot or parcel so transferred or sold or agreed or negotiated to be sold; and the description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transactions from such penalties. Said municipality, through its solicitor or other official designated by its council may enjoin such transfer or sale or agreement and may recover the said penalty by civil action.

B. SITE PLANS

Pursuant to the authority vested in the Derry Planning Board by the voters of the Town of Derry and in accordance with the provisions of New Hampshire RSA 674:43 and RSA 674:44, the Planning Board adopts the following regulations governing Site Plans for the development of tracts for nonresidential uses, or for multi-family dwelling units. These regulations shall apply not only to new development, but also to the enlargement or expansion of facilities or changes of use thereof, or the addition of any appurtenant facilities, except that Site Plan approval shall not be required when in the opinion of the PLANNING BOARD, (Adopted 9/29/93) the proposed enlargement or expansion of facilities, or change of use thereof, or the addition of any appurtenant facilities, has minimal or no effect on the site as previously

existing or approved. Site Plan approval shall be obtained prior to issuance of a building permit and/or commencement of construction or use. These Site Plan regulations have been promulgated to protect and promote the public health, convenience, safety and general welfare of the residents of the Town; to provide for responsible and desirable growth; to provide adequate provision for traffic circulation, pedestrian movement and adequate ingress and off-street parking facilities; to provide for adequate provision of public services and facilities and on-site outdoor lighting; to avoid development which will have detrimental environmental or financial impacts; and to provide for appropriate landscaping and building aesthetics.

C. VALIDITY

If any section, clause, provision, portion, or phrase of these regulations shall be held to be invalid or unconstitutional by any court of competent authority, such holding shall not affect, impair or invalidate any other section, clause, provision, portion or phrase of these regulations.

D. CONFLICTING PROVISIONS

Whenever the regulations made under the authority hereof differ from those prescribed by any statute, ordinance or other regulations, that provision which imposes the greater restriction or the higher standard shall govern.

E. AMENDMENTS

These regulations may not be amended or rescinded by the Planning Board but only following public hearing on the proposed change. The Chairman or Secretary of the Planning Board shall transmit a record of any changes so authorized to the Registry of Deeds of Rockingham County.

F. RECORD OF ADOPTION

These regulations shall take effect upon their adoption by the Planning Board.

II. DEFINITIONS

APPLICANT - means the Owner, or the person or persons authorized by the Owner(s) to act on behalf of the Owner(s) in all matters concerning these regulations.

APPROVED STREET - is a private way, street, or highway laid out on a plat approved by the Planning Board and filed in the Registry of Deeds of Rockingham County.

BOARD - means the Planning Board of the Town of Derry.

COMMUNITY WASTEWATER SUPPLY SYSTEM - a non-Municipal Wastewater Supply System that serves an average of at least twenty-five (25) individuals daily, year round or that has at least fifteen (15) connections.

COMMUNITY WATER SUPPLY SYSTEM - a non-Municipal Water Supply System that serves an average of at least twenty-five (25) individuals daily, year round, or that has at least fifteen (15) service connections.

CHECKLIST - is a document available at the Planning Board Office which lists the Board's requirements for submission of plans. This document will become part of the permanent file.

ENGINEER - means a Professional Engineer licensed to practice in the State of New Hampshire.

MUNICIPAL WASTEWATER SYSTEM - A wastewater collection, treatment, and disposal system that serves an average of at least twenty-five (25) individuals daily, year round or that has at least fifteen (15) service connections and that is owned and operated by a municipal or regional government. (Adopted 10/9/96)

MUNICIPAL WATER SUPPLY - A water supply system that serves an average of at least twenty-five (25) individuals daily, year round or that has at least fifteen (15) service connections and that is owned and operated by a municipal or regional government. (Adopted 10/9/96)

OWNER - means the person or persons who have a legal interest in the land being subdivided or upon which a Site Plan is being proposed. Such parties shall be as listed in the Rockingham County Registry of Deeds.

PERFORMANCE GUARANTEE - is a security that may be accepted in lieu of a requirement that certain improvements be made before the Planning Board approves a Final Plat or Site Plan, including irrevocable letters of credit, escrow agreements, and other similar collateral. Escrow monies shall not be released until a third party licensed Surveyor or Engineer has certified that the boundary monuments have been set. All letters of credit must be automatically renewable.

PLAT - means the final map, drawing or chart on which the applicant's plan of subdivision is presented to the Derry Planning Board for approval and which, if approved, will be submitted to the Register of Deeds of Rockingham County for recording.

SHALL - is considered mandatory.

SITE PLAN - means the drawing on which the applicant's plan of development for nonresidential or multi-family is presented to the Board for approval and which, if approved, will be submitted to the Register of Deeds of Rockingham County for recording.

STREET, - or however otherwise designated, means a way for vehicular traffic.

SUBDIVIDER - See APPLICANT.

SUBDIVISION - means the division of the lot, tract or parcel of land into two or more plots, plats, sites or other divisions of land for the purpose, whether immediate or future, of sale, rent, lease, condominium conveyance or building development. It includes the resubdivision and, when appropriate to the context, relates to the process of subdividing or to the land subdivided. The division of a parcel of land into parts among several owners shall be deemed a subdivision under this title (RSA 672:14).

SURVEYOR - means a Licensed Land Surveyor licensed to practice in the State of New Hampshire.

TOWN PLANNER - means a duly designated planner of the Town of Derry or, if there is none, the person designated by the Town Administrator.

TOWN ENGINEER - means a duly designated engineer of the Town of Derry or, if there is none, the person designated by the Town Administrator.

III. PROCEDURES

A. PREAPPLICATION

Prior to formal application for subdivision or Site Plan approval, the applicant, or his authorized agent, may request an informal hearing with the Board to discuss the proposal and preliminary concepts associated with the proposed development, to provide the Board an opportunity to provide its input to assure conformance with current regulations.

B. APPLICATION

1. Whenever any subdivision is proposed to be made and before any contract for the sale of, or any offer to sell, such subdivisions or any part thereof shall have been negotiated, and before any application for a permit for the erection of any structure thereon shall be made, the owner or his authorized agent shall apply in writing to the Board for approval of such subdivision.
2. Application for approval where abutter notification is required shall be filed at the Planning Board office, not less than 15 days before any regularly scheduled meeting. The Planning Board office shall furnish the applicant with a receipt stating the date, time and all fees received. Abutter notification shall be required for both Preliminary and Final Plats, and Site Plans, per New Hampshire RSA 674:4.
3. All applications for the review of Preliminary and Final Plats, and Site Plans, by the Board shall be made in writing by the owner of the tract(s), or his authorized agent, and shall include the following:
 - a. Application Form - Exhibit A
 - b. Submission Checklist - Exhibit B1, B2, or B3
 - c. Checks for all fees required for submission.
 - 1) Application and Notice to Abutters fees payable to the "Town of Derry."
 - 2) Plan Review fee payable to "Derry Planning Department - Plan Review."

- d. Complete abutters' list, based on Town records, supplemented by a review of the records in the Rockingham County Registry of Deeds not more than five (5) days prior to the submission of the application to the Board.
- e. Plans, calculations, reports and information as specified in these regulations. All plans, calculations and reports shall be submitted in bound sets.
- f. Complete list of any the Land Development Control Regulations (LDCR) for which the applicant is seeking a waiver, with a comprehensive written explanation of the basis for any such waiver.
- g. Written, signed and notarized appointment of an agent to appear before the Board if the owner is not to be present at public hearings.
- h. Comprehensive written summary of any agreement established between the applicant and any Town body, official or employee on which the applicant intends to rely, and countersigned by such body, official or employee. The foregoing summary is for Planning Board information and is not binding on the Planning Board.
- i. Other information may be required by the Board during the review process.

The owner, or authorized agent, shall complete the application form and shall execute under oath the affirmation thereon.

Failure to comply with these application procedures and/or failure to comply with all applicable laws, ordinances and regulations shall be grounds for summary disapproval of the application.

- 4. After the application has been submitted to the Board's office, such application shall not be supplemented, amended or modified except at the request, or with the permission of the Town Planner. Notwithstanding the foregoing, the application may be withdrawn prior to the first public hearing; however, all application fees shall be forfeited and the applicant shall remain liable for all consultants' fees incurred prior to withdrawal of the application.

5. The scheduled date listed on the Submission Checklist (Exhibit B1, B2 or B3) by the Board's administration staff is an estimate only. All applications will be dealt with in the order in which they are received. The applicant and/or agent will be notified as of any required rescheduling.
6. The applicant shall be familiar with the current Master Plan for the Town of Derry.
7. The applicant may submit Preliminary and Final Subdivision or Site Plan applications simultaneously, provided that applicant has previously had "discussions" with the Planning Board with respect to the proposed development. The Planning Board will hear such combined applications at the same public hearing but shall review the Preliminary application first.

Discussion - plan format and contents shall be in accordance with the recommendation of the Town Planner.

8. By filing an application with the Board, the applicant (including all of the applicant's agents, consultants and representatives) consents to the review of the application and all associated materials by an independent consultant(s) retained by the Board for the purpose of:
 - a. Confirming that all materials submitted by the applicant conform with applicable laws, ordinances, regulations and requirements.
 - b. Recommending to the Board any prudent additional applicant provided studies, investigations and/or information which could facilitate the Board's determination that the proposed development:
 - (1) would not involve danger or injury to health, safety or prosperity by reason of the lack of water supply, drainage, transportation, schools, fire protection or other public services, or necessitate the excessive expenditure of public funds for the supply of such property;

(2) which would tend to create conditions favorable to health, safety, convenience and prosperity; all in accordance with good municipal planning and development practices. Such consultants may include Land Surveyors, Engineers, Architects, Attorneys, Soil Scientists, Wetland Scientists or others who may have expertise in particular fields related to the application.

C. FEES

The following fees shall be paid at the time of application for review by the Board:

| | Application Fee | Notice To Abutters | Plan Review Fee |
|-------------------------|--------------------|--|--------------------------|
| Preliminary Subdivision | \$20/lot | \$1.50/abutter | \$40/lot (min.\$225) |
| Final Subdivision | \$20/lot | \$1.50/abutter | \$40/lot (min.\$225) |
| Site Plan: | | | |
| Multi-family | \$100 | \$2.50/abutter | \$40/unit (min.\$450) |
| Commercial/Industrial | \$100 | \$2.50/abutter | 450/acre* |
| Other | \$100 | *or fraction of an acre To be determined by the Board | |

The Plan Review Fees shall not apply to land transfers or lot consolidations

D. PUBLIC HEARING

1. The completed application for Preliminary Plat, Final Plat or Site Plan review, together with the related materials and documentation, shall, within Thirty 30 days following receipt from the applicant, be placed on the Board's agenda for Public Hearing. The Board will establish its agenda schedule on the basis of date of receipt of completed applications, accompanied by all items required by these regulations (i.e., first come,

first served basis). No Plat or Site Plan shall be approved or disapproved by the Board without affording the applicant a Public Hearing thereon.

2. The owner(s) of every parcel which is the subject of the related to such review. Alternatively, the owner(s) may appoint an agent, by means of a written, signed and notarized authorization, to act for and on behalf of the owner(s) at such public hearings; however, such authorization must afford the agent the full power to make all decisions and commitments with respect to the Board's review of the proposed development which the owner(s) could make if personally present.

E. PRELIMINARY LAYOUT

Eight (8) copies of the Preliminary Plat as described in Section IV shall be filed with the Board at the time of application. The Board will then study the preliminary layout and proposed streets in connection with the topography of the area, the existing requirements of the community, and the best use of the land to be subdivided and that of the adjoining areas.

F. REVISION OF PRELIMINARY LAYOUT

The Board, before taking formal action, shall hold discussions with the subdivider or his agents and may hear and confer with other parties whose interests may be affected by the proposed layout. After such discussions, the Board shall communicate to the developer the specific changes, if any, which it will require in the preliminary plan and the amount of construction or improvement it may require as a prerequisite to the subsequent approval of the subdivision plan. The Board may disapprove of the preliminary layout in its entirety, but shall state its reason for such disapproval.

G. FINAL OR SITE PLANS

The subdivider, after official notification by the Board with respect to the preliminary plan and the changes, if any, to be made therein, shall within six months thereafter, file with the Board drawing of the Final Plat as described in Section IV. The subdivider shall tender offers of cession, in a form certified as satisfactory by the corporation counsel, of all land included in streets, highways, or parks not specifically reserved by him,

but approval of the plat by the Board shall not constitute an acceptance by the Town of the dedication of any street, highway or park or other public open space. Before the Final Plat shall have been approved or disapproved, the Board shall hold a public hearing on the plan. Notice thereof shall be sent to the subdivider and abutters by certified mail with return receipt requested (for Site Plans only), stating the time and place of such hearing not less than ten(10) days before the date fixed thereof. Advance notice of such meeting shall be published in a local paper. The subdivider or his representative shall be present at the public hearing.

H. APPROVAL

1. The Board shall place on its agenda for consideration any plat or site plan submitted to it within 30 days and shall act to approve or disapprove thereof within 90 days, in accordance with Chapter 676:4, NH RSA, 1984, as amended. If the Board approved the plat, the Chairman of the Board or his agent shall transmit a copy to the Registry of Deeds of Rockingham County for recording, at Town expense, within 10 days.
2. The proposed development or activities related thereto will not be in violation of any Federal, State or local law, ordinance or regulation. Any and all required permits/approvals from such entities shall be obtained by the applicant prior to consideration of the Site Plan by the Board, unless such permits/approvals require that the Site Plan approval be obtained first. Documentation evidencing such permits/approvals shall be submitted to the Board with the application.
3. Unless the applicant can affirmatively demonstrate that the proposed development will not have a material adverse impact on the Town's infrastructure and/or services, including but not limited to roads, schools, traffic flow, police, fire, water and sewer, the Board may require that the proposed development be constructed in phases as approved.
4. Before final approval is recorded at the Registry of Deeds, there shall be filed a performance guarantee by the subdivider in an amount sufficient to cover the cost of preparation of the streets, curbs, sidewalks,

street lights, street signs, traffic signals, municipal water and municipal sewer facilities setting boundary monuments, parks and recreational area, or other off-site improvements where applicable. This performance guarantee shall be approved as to form and sureties by the legal counsel of the Town of Derry, and conditioned on the completion of such improvements within two years of the date of the performance guarantee unless released by a vote of the Board, by request of the subdivider.

5. In order to confirm that various items and features, delineated on plans presented to the Planning Board for approval (or which are otherwise required in connection with the development), are in fact constructed in accordance with those plans and/or in accordance with applicable codes and standards, the Planning Board may, at the time of plan approval, require the applicant to establish an appropriate escrow, or other security, acceptable to the Planning Board, which will be used by the Town of Derry as security for retention of appropriate engineers or other consultants to confirm that construction is in conformance with the approved plans and/or applicable codes and standards. The applicant shall reimburse the Town for the cost of such engineers or consultants, prior to release of escrow.
6. In order to provide a permanent record of the locations, dimensions and characteristics of various items and features, delineated on plans presented to the Planning Board for approval (or which are otherwise required in connection with the development), the Planning Board shall require the applicant to provide "as built" drawings, sealed by a Registered Professional Engineer, or Licensed Surveyor, prior to the "Final" release of escrow pertaining to such items.
7. Where, in the opinion of the Board, a lot or lots are unsuitable for the subdivider's intended use due to such factors as scattered or premature subdivision of land as would involve danger or injury to health, safety, or prosperity by reason of lack of water supply, drainage, transportation, or other public services, or necessitate an excessive expenditure of public funds for the supply of such services, the Board may, after suitable investigation, withhold approval of such lots.
(Adopted 9/25/91)

I. CERTIFICATE OF FAILURE TO TAKE ACTION

The Town Clerk is hereby specified as the municipal officer who shall issue on behalf of the Board a certificate of failure on the part of the Planning Board to take action on approval or disapproval of a plat submitted to it, as provided by RSA Chapter 676, Section 4, 1984.

J. WAIVER OF REQUIREMENTS

1. When in the opinion of the Board, specific requirements in these regulations would be unduly burdensome on the applicant with respect to the particular tract which is the subject of the application, the Board may, waive such requirements for good cause demonstrated by the applicant in writing.
2. The requirements of Section IV of these Regulations pertaining to "Special Flood Hazard Areas" shall not be subject to these waiver provisions. (Paragraph 2-Added 1/19/93)

IV. GENERAL REQUIREMENTS FOR PLATS AND SITE PLAN SUBMITTALS

A. GENERAL REQUIREMENTS

1. All Plats and Plans submitted to the Board for review shall be prepared by a Professional Engineer or Land Surveyor licensed to practice in the State of New Hampshire. Scale of all drawings shall be 100 feet to the inch or less for all Preliminary Plats and 50 feet to the inch or less for all Final Plats and Site Plans, and shall be limited to a sheet size of 22 inches by 34 inches with a one inch margin on three sides for binding. Lettering size shall be not less than 1/8 (0.12) inch. If more than one sheet is necessary to show the entire subdivision or Site Plan at the required scale, it must be shown in its entirety at a different scale on another sheet. All match lines shall be clearly shown and labeled. Two copies of the Final and/or Site Plan submitted to the Board for approval and recording in the Registry of Deeds shall be on mylar with a thickness of not less than .002 inches, with all markings on the material to be with India or other permanent ink. All plans shall be limited to a size of 22 x 34 inches, or such

specifications sizes of prints as may be required by the Registry of Deeds of Rockingham County in order to insure suitable permanent records.

2. *Special Flood Hazard Areas* - All subdivision proposals and proposals for other developments governed by these Regulations have lands identified as Special Flood Hazard Area by the Federal Emergency Management Agency (FEMA) in its "Flood Insurance Study for the Town of Derry, NH" together with the associated Flood Insurance Rate Maps (FIRM) and the Flood Boundary and Floodway Maps dated April 15, 1982, shall meet the following requirements:
 - a. The Planning Board shall review the proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, included Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
 - b. The Planning Board shall require that all subdivision proposals and other proposed new developments greater than fifty (50) lots or five (5) acres, whichever is the lesser, include within such proposals base flood elevation data.
 - c. Sufficient evidence (construction, drawings, grading and land treatment plans) shall be submitted so as to allow a determination that:
 - (1) all such proposals are consistent with the need to minimize flood;
 - (2) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and
 - (3) adequate drainage is provided so as to reduce exposure to flood hazards. (#2-Amended 1/19/93)
3. In order to obtain the approval of the Planning Board, the applicant must affirmatively demonstrate to the Board, by a preponderance of the credible evidence presented at a public meeting or meetings, that all the requirements have been met and that the procedures set forth in Section III have been followed.

4. Prior to submitting plans, the applicant shall consult with the Public Works Director regarding the proposal.
5. No development which requires approval by the Board will be permitted in the conservation corridor, unless the applicant can demonstrate to the Board that there will be no impairment of the absorptive capacity of the wetlands within the conservation corridor, as defined by the Town of Derry Zoning Ordinance, that flood water elevations will not be increased, and that there will be no harm caused to any wildlife.

B. PRELIMINARY PLAT

In addition to the requirements of Section III of these Regulations, the Preliminary Plat submittal shall include the following information:

1. Proposed subdivision name, north arrow, scale, date of preparation.
2. Boundary information prepared from existing deeds and field information. Distances shall be shown to the nearest foot and bearings shall be shown to the nearest one minute.
3. Names, addresses and phone numbers.
 - a. Owner(s) of record
 - b. Applicant
 - c. Engineer or Land Surveyor
4. Locus map at a scale of 2,000 feet to the inch or less.
5. Abutting lot lines, streets alleys, easements, parks, public open spaces, zoning districts. All shall be clearly labeled and Tax Map numbers indicated where applicable. Name and address of all abutters shall be included and shall also be submitted on a separate sheet of paper with owner/developer's name.
6. Proposed location of all lots and/or parcels.
 - a. Lot number or parcel designation
 - b. Scaled dimensions
 - c. Size in square feet and acres

7. Proposed location name, width and dimensions of all streets. Dimensions shall include lengths of tangents, and radius and length of all curves. Where the Preliminary Layout submitted covers only a part of the subdivider's entire holding, a sketch of the prospective future street system of the part not submitted will be considered in light of adjustments and connections with the street system of the part not submitted.
8. Location and dimensions of all easements, building setbacks and other restrictions.
9. Existing topography showing surface contours at an interval of two feet or less water courses, ponds, standing water, wetlands, rock outcrops and ledges, tree lines, utility poles, buildings, pavement and gravel areas, and other physical features as may be found. Topography shall extend a minimum of 100 feet beyond the subdivision boundary.
10. Existing and proposed water mains, sanitary sewers, storm sewers and culverts including size, material and direction of flow. If municipal water and sewer systems will not be utilized, alternate means shall be clearly stated and shown.
11. Preliminary designs of any bridges or other structures which may be required.
12. Preliminary Drainage Report and Calculations.
13. Drainage Plan showing the following:
 - a. The direction of runoff, both existing and proposed, through the use of arrows.
 - b. The existing and proposed methods of handling stormwater runoff.
 - c. The location, elevation and size of all catch basins, storm sewers, culverts, drainage ditches, swales and retention/detention basins.
14. High Intensity Soil information, showing soil types and locations.

C. FINAL PLAT

In addition to the requirements of Section III and the foregoing requirements of Section IV of these Regulations, the Final Plat submittal shall include the following information:

1. a. Proposed subdivision name or identifying title, name and address of the owner of record and subdivider, and the name of the surveyor, date, scale, north point, lot numbers and locus.
- b. The area of the parcel, street frontage and zoning requirements for minimum lot size and frontage.
- c. Zoning classification(s) of the parcel and the location of the zoning district boundaries if the parcel is located in two or more zoning districts.
2. Sufficient data to determine readily the location, bearing and length of all street lines, lot lines, boundary lines and to be able to reproduce such lines upon the ground. All dimensions shall be shown to the hundredths of a foot and bearings to the nearest one second. The error of closure shall not exceed 1 in 10,000. The Final Plat shall show the boundaries of the property, the location and description of all monumentation, a benchmark referencing U.S.G.S. Datum and shall be prepared and shown on a plan(s) and shall be certified by and sealed by a Surveyor.

Boundary monuments shall be installed at all turning points on the lot lines and any other point the Board, or its agent deem necessary to control the line of streets, easements, or rights-of-way. 4" x 4" x 36" reinforced concrete or stone markers shall be installed where required adjacent to all streets and shall be installed so as to protrude not less than 3 inches nor more than 6 inches above final grade. Iron Pipe may be used at all other points and must be at least 36 inches long and protrude a nominal 12 inches.

3. Street lines, building lines, pedestrian ways, lot lines, reservations, easements and areas to be dedicated to public use and areas, the title to which are reserved by the developer.
4. All stipulations and restrictions intended to remain in perpetuity shall be shown on the Final Plat.

5. A signature and title box with a place for signature and date of approval by the Board, shall be placed on each recordable sheet in the lower right hand corner of the sheet.
6. Tax map and lot numbers of all abutting properties with current abutters appearing on the plat and on a separate sheet to include owner/developer.
7. The applicant shall obtain a house number for each lot in the subdivision from the Chief of the Derry Fire Dept. for the eventuality of a house being constructed on each lot. Should a property be subdivided which has already been assigned a house number, appropriate modification shall be required.
8. Topography shall be prepared, shown on a plan(s), and shall be certified and sealed by an Engineer or Surveyor.
9. High Intensity Soil information (showing soil types and locations) shall be prepared, shown on a plan(s), and shall be certified by a Certified Soil Scientist.
10. Wetland information shall be prepared, shown on a plan(s), and shall be certified by a Certified Soil Scientist or Wetland Scientist.
11. Drainage calculations shall be prepared, certified and sealed by an Engineer; and drainage improvements shall be shown on a plan(s).
12. Subdivision and Site Plans shall include plans for controlling erosion and sedimentation. Acceptable methods for erosion and sediment control measures include those as outlined in Erosion And Sediment Control Design Handbook for Development Areas of New Hampshire" as prepared by USDA SCS, Durham, NH.
13. Sanitary sewer calculations shall be prepared, certified and sealed by an Engineer; and sanitary sewer improvements shall be shown of a plan(s).
14. Water distribution calculations shall be prepared, certified and sealed by an Engineer; and water distribution improvements shall be shown on a plan(s).

15. Traffic impact statements shall be prepared and certified by an Engineer.
16. Drawings required with the Final Plat shall be prepared, shown on a plan(s), and certified and sealed by an Engineer.
 - a. Profiles of all proposed streets, water mains, sewers and open waterways shall be shown on a horizontal scale of 1 inch to 50 feet, and vertical scale of 1 inch to 5 feet. All elevations shall refer to an established benchmark.
 - b. Drainage, sanitary sewer and water distribution plans shall have the following requirements:
 - (1) Outlines of streets, lots, easements, etc. as shown on the Final plan with distances to the nearest foot.
 - (2) Location of all manholes, catch basins, hydrants, structures and utility poles or underground lines and pipes.
 - (3) Sizes and type or class of all pipe, including storm sewer, sanitary sewer, water and gas.
 - (4) Location and type of special structures.
 - (5) Proposed tax map and lot number for each lot.
 - c. Drawing format - All information shown on drawings shall be left to right reading, with the lettering shown in a plane parallel with the bottom edge of the drawing. If dimensions or other data have to be shown in a plane other than parallel with the bottom of the drawing, the lettering placement in all planes shall be that the information is readable as the drawing is rotated clockwise. The type lettering shown on the drawings shall be vertical upper case Gothic. The size of lettering shall be a minimum of 1/8 (.12) inch high, which shall be used for the majority of information shown on the drawing. Space between adjacent 1/8-inch high characters shall be such as to not exceed a maximum of ten characters to the inch.

17. A completed checklist shall be required and shall be signed by the applicant or his agent.
18. The Planning Board may for good cause shown and with the recommendation of the Director of the Public Works Department, waive one or more of the foregoing.
19. Copies of all required approved permits (Federal, State and Local) shall be submitted.

D. SITE PLANS

In addition to the requirements of Section III and the foregoing requirements of Section IV.C of these Regulations, the Site Plan submittal shall contain the following information:

1. The area of the parcel, street frontage and zoning requirements for minimum lot size and frontage.
2. Zoning classification(s) of the parcel and the location of the zoning district boundaries if the parcel is located in two or more zoning districts.
3. A block containing signatures of the Public Works, Code Enforcer, Derry or East Derry Fire Department, Conservation Commission and Police Department. It is the responsibility of the applicant to obtain the signatures, further, the absence of any signature may be considered to be grounds for disapproval.
4. Proposed access points onto all public highways together with plan and profiles or other information necessary to show that the access points meet all applicable safety and sight distance requirements.
5. Pedestrian walkways and recreational trails.
6. Parking areas and loading areas.
7. Emergency vehicle access. The applicant shall have the plans for the proposed development signed by the Fire Chief prior to submission of the plans to the Board, or the applicant shall obtain a written statement from the Fire Chief indicating his objections to the plans.

8. Location and details of facilities for storage of solid and/or liquid waste including recycables and/or hazardous materials, other than sewage. Such facilities shall be screened from view by the use of solid fences or walls together with plantings of shrubbery, and shall be located a minimum of twenty-five(25)feet from any and all boundary lines. The applicant shall furnish evidence that suitable means will be available for the removal and disposal of any solid and/or liquid waste from the development. See Town of Derry Recycling Ordinance.

The applicant shall specify all activities and/or processes which are expected to take place at the site and the measures that are to be taken to control the effects thereof. Quantities and types of raw materials and utilities which will be consumed must be specified together with a complete technical description of the use thereof the resulting finished products and materials as well as the unused and/or waste products.

9. Location of all outdoor lighting, such lighting shall not have an adverse impact on surrounding properties or off-site activities. All lighting shown on the plan shall have the intensity, type and hours of operations indicated.
10. Location, size, height, color and materials of construction of all existing and proposed buildings and other structures.
11. Detailed landscaping plan indicating location, size, number, scientific name, common name and any planting and/or maintenance information.
12. Location and architectural elevations of all sides of all buildings, structures and ground mounted signs.

13. Open Space Requirements

Except in the Downtown Business District, as defined by the Town of Derry Zoning Ordinance, at least one-third of the gross developable area of the site shall be covered with vegetation, including grass, shrubs and trees, in an aesthetically pleasing combination with will, in the opinion of the Board, effectively screen the proposed development from the adjacent properties and public highways. The applicant shall submit a plan showing the existing growth on the site and that proposed upon the completion of the development. Wetland areas shall not be considered in the computation of the aforementioned vegetated area.

PART 2 - DESIGN REQUIREMENTS

V. LOTS

A. SUBSTANTIAL CONFORMITY

The proposed subdivision shall conform to the Zoning Ordinance of the Town of Derry. Where strict conformity to the subdivision regulations would cause an undue hardship or injustice to the owner of the land, a subdivision also in substantial conformity with regulations may be approved by the Board, provided that the spirit of the regulations and public convenience and welfare will not be affected.

B. BUILDING LOT REQUIREMENTS

1. There will be only one single family dwelling unit on a lot.
2. Whenever possible, side lot lines shall be at right angles to straight streets and radial to curved streets. Lot lines shall follow municipal boundaries, rather than cross them.
3. Each lot must face an approved street. Also, no driveway in a subdivision may be laid out such that its curb cut will be closer than 100 feet to a major traffic intersection.
4. Where, in the opinion of the Board, a lot or lots are unsuitable for the subdivider's intended use due to such factors as scattered or premature subdivision of land as would involve danger or injury to health, safety, or prosperity by reason of lack of water supply, drainage, transportation, or other public services, or necessitate an excessive expenditure of public funds for the supply of such services, or such other reasons as the Board may deem appropriate, the Board may, after suitable investigation, withhold approval of such lots.
5. Land of such character that it cannot be safely used for building purposes because of exceptional danger to health or peril from fire, flood, or other menace shall not be platted for residential occupancy, nor for such other uses as may increase danger to health, life, or property or aggravate the flood hazard, until appropriate measures have been taken by the owner or his agent to lessen the hazards.

6. Residential lots in all subdivisions shall be in strict conformance to the Town of Derry Zoning Ordinance. (see also section B.C - Soils Based Lot Size Determination)
7. Remnants of lots below usable size left over after subdividing a large tract shall be added to adjacent lots rather than remain as unsuitable parcels.
8. Minimum frontage requirements must be continuous and uninterrupted.
9. Each lot shall have its driveway access through its own frontage.

C. SOILS BASED LOT SIZE DETERMINATION

1. PURPOSE

The Planning Board for the Town of Derry, New Hampshire, hereby adopts these Regulations in accordance with the provisions of RSA 674:36 in order to protect the Town against the danger to health, safety and prosperity occasioned by the lack of municipal water and sewer and to prevent the excessive expenditure of public funds for the supply of such services.

2. DEFINITIONS

As used in this Regulation, the following terms shall have the following meaning unless the context clearly indicates otherwise:

Certified Soil Scientist - A person qualified in soil classification and mapping who is certified by the New Hampshire State Conservation Committee.

Commercial - As defined by the Town of Derry Zoning Ordinance.
Community Wastewater System - A non-municipal wastewater supply system that serves an average of at least twenty-five (25) individuals daily year-round or that has at least fifteen (15) service connections.

Community Water Supply System - A non-municipal water supply system that serves an average of at least twenty-five (25) individuals daily year-round, or that has at least fifteen (15) service connections.

Industrial - As defined by the Town of Derry Zoning Ordinance.

Municipal Wastewater System - A wastewater collection, treatment, and disposal system that serves an average of at least twenty-five (25) individuals daily, year round or that has at least fifteen (15) service connections and this is owned and operated by a municipal or regional government.

Municipal Water Supply - A water supply system that serves an average of at least twenty-five (25) individuals daily, year round or that has at least fifteen (15) service connections and that is owned and operated by a municipal or regional government.

Residential - As defined by the Town of Derry Zoning Ordinance.

Slope - The average steepness of the land surface under consideration. For the purpose of determining lot size categories, slope shall be determined by slope factors used by the National Cooperative Soil Survey soil classification (where B = 0-8%; C = 8-15%; D = 15-25%; and E = >25%).

Soil Type - As defined by High Intensity Soil Maps for New Hampshire on file with the Rockingham County Conservation District.

Subdivision - As defined by the Town of Derry Subdivision Regulations.

Wetlands - Lands containing soils classified by the National Cooperative Soil Survey as poorly drained, very poorly drained, including freshwater and saltwater marshes or alluvial soils.

3. MINIMUM LOT SIZES

In the absence of municipal sewerage facilities, minimum lot sizes within all subdivisions shall, in addition to meeting the requirements of the zoning ordinance for the district wherein the subdivision is proposed, also meet the lot requirements specified in Table A, "Minimum Lot Size by Soil Type." The form entitled "Lot Requirements Based on Soil Type," which is included at the end of this section, shall be used for all lot size determinations referred herein.

This requirement is subject to the following qualifications:

a. Where more than one soil type is found on a lot, a weighted average of those soils occurring on the lot shall be used to determine the minimum lot size.

b. Wetlands may be used as part of the computed lot size according to the following:

(1) Areas designated as poorly drained soils may be utilized to fulfill 25% of the minimum required lot size provided that the non-wetland area is sufficient in size and configuration to adequately accommodate all required utilities such as sewage disposal and water supply, including primary and auxiliary leachfield locations.

(2) Areas designated as very poorly drained, fresh or saltwater marsh or alluvial soils may not be utilized to fulfill minimum lot size.

(3) Except as set forth in the Derry Zoning Ordinance, so subsurface wastewater disposal system shall be constructed within 75 feet of any designated wetland area.

c. Minimum lot sizes for residential developments with greater than four bedrooms per unit and for commercial and industrial developments shall be determined as follows:

(1) For residential use with five or more bedrooms per unit, the minimum lot size shall be proportionately larger than the lot size indicated in Table A as determined by the formula:

$$\begin{array}{lcl} \text{Lot Size} & \# \text{ of Bedrooms} & \\ \text{(s.f.)} = & 4 & \times \text{ (Lot size from Table A)} \end{array}$$

(2) For commercial and industrial uses, lot sizes will be determined by the formula:

$$\begin{array}{lclcl} \text{Lot Size} & \text{Gal. of Wastewater/Day} & \text{Lot Size} & \text{Land Required} & \\ \text{(s.f.)} = & 1837 \text{ (gpd/40,000 ft.)} & \times \text{ from} & + \text{ for well} & \\ & & \text{Table A} & \text{radius} & \end{array}$$

Gallons of wastewater discharged per day shall be determined from Table 5-1 "Unit Design Flow Figures" of the New Hampshire Water Supply and Pollution Control Commission publication, Guide for the Design, Operation and Maintenance of Small Sewage Disposal Systems, January 1978, as amended.

- (3) Final Site Plan approval for industrial development which is of such nature or character as to require State or Federal permits for pre-treatment and discharge or subsurface disposal shall not be granted until all such permits are secured. The conditions upon which such permits are issued shall comply with State and Local regulations and be made part of the record before the Planning Board.

4. DETERMINATION OF SOIL TYPE

- a. Tests for determining soil information for use in this section shall be performed by a Qualified Soil Scientist using published soil data with on-site inspections as necessary.
- b. Soil data using the standards of High Intensity Soil Maps of New Hampshire shall be provided as part of the subdivision plan at the scale and dimensions required. Any cover letters or explanatory data provided by the Qualified Soil Scientist shall also be submitted.
- c. All costs of performing such investigations shall be borne by the subdivider.

TABLE A

MINIMUM LOT SIZE BY SOIL TYPE

| Soil Type | Lot Size | Soil Type | Lot Size | Soil Type | Lot Size |
|-----------|----------|-----------|----------|-----------|----------|
| 111BH | 40000 | 212BH | 75000 | 23XCH | 100000 |
| 111CH | 45000 | 212CH | 80000 | 23XDH | 140000 |
| 111DH | 60000 | 212DH | 95000 | 23XEH | NA |
| 111EH | NA | 212EH | NA | 241BH | 50000 |
| 112BH | 75000 | 213BH | 50000 | 141CH | 75000 |
| 112CH | 80000 | 213CH | 75000 | 241DH | 100000 |
| 112DH | 95000 | 213DH | 100000 | 241EH | NA |
| 112EH | NA | 213EH | NA | 243BH | 50000 |
| 114*H | NA | 214*H | NA | 243CH | 75000 |
| 11XBH | 80000 | 21XBH | 80000 | 243DH | 100000 |
| 11XCH | 100000 | 21XCH | 100000 | 243EH | NA |
| 11XCH | 100000 | 21XDH | 140000 | 244*H | NA |
| 11XEH | NA | 21XEH | NA | 24XBH | 90000 |
| 121BH | 40000 | 221BH | 40000 | 24XCH | 130000 |
| 121CH | 45000 | 221CH | 45000 | 24XDH | 180000 |
| 121DH | 60000 | 221DH | 60000 | 24XEH | NA |
| 121EH | NA | 221EH | NA | 251BH | 90000 |
| 122BH | 75000 | 222BH | 75000 | 251CH | 135000 |
| 122CH | 80000 | 222CH | 80000 | 251DH | 150000 |
| 122DH | 95000 | 222DH | 95000 | 251EH | NA |
| 122EH | NA | 222EH | NA | 253BH | 90000 |
| 124*H | NA | 223BH | 50000 | 253CH | 135000 |
| 12XBH | 80000 | 223CH | 75000 | 253DH | 160000 |
| 12XCH | 100000 | 223DH | 100000 | 253EH | NA |
| 12XDH | 140000 | 223EH | NA | 254*H | NA |
| 12XEH | NA | 224*H | NA | 25XBH | 130000 |
| 161BH | 50000 | 22XBH | 80000 | 25XCH | 190000 |
| 161CH | 55000 | 22XCH | 100000 | 25XDH | 240000 |
| 161DH | 70000 | 22XDH | 140000 | 25XEH | NA |
| 161EH | NA | 22XEH | NA | 261BH | 50000 |
| 164*H | 40000 | 231BH | 40000 | 261CH | 55000 |
| 166*H | NA | 231CH | 45000 | 261DH | 70000 |
| 16XBH | 90000 | 231DH | 60000 | 261EH | NA |
| 16XCH | 110000 | 231EH | NA | 263BH | 60000 |
| 16XDH | 150000 | 233BH | 50000 | 263CH | 85000 |
| 16XEH | NA | 233CH | 75000 | 263DH | 110000 |
| 211BH | 40000 | 233DH | 100000 | 263EH | NA |
| 211CH | 45000 | 233EH | NA | 264*H | NA |
| 211DH | 60000 | 243*H | NA | 2668h | NA |
| 211EH | NA | 23XBH | 80000 | 26XBH | 90000 |
| 26XCH | 110000 | 33XBH | 115000 | 412BH | 145000 |
| 26XDH | 150000 | 33XCH | 155000 | 412CH | 190000 |
| 26XEH | NA | 33XDH | 205000 | 413BH | 90000 |
| 275*H | NA | 33XEH | NA | 413CH | 135000 |
| 311BH | 60000 | 341BH | 75000 | 414*H | NA |
| 311CH | 90000 | 341CH | 100000 | 41XBH | 150000 |

| Soil Type | Lot Size | Soil Type | Lot Size | Soil Type | Lot Size |
|-----------|----------|-----------|----------|-----------|----------|
| 311DH | 120000 | 341DH | 125000 | 41SCH | 180000 |
| 311EH | NA | 341EH | NA | 421BH | 75000 |
| 312BH | 95000 | 343BH | 75000 | 421CH | 115000 |
| 312CH | 125000 | 343CH | 100000 | 422BH | 130000 |
| 312DH | 155000 | 343DH | 125000 | 422CH | 165000 |
| 312EH | NA | 434EH | NA | 423BH | 90000 |
| 313BH | 60000 | 344*H | NA | 423CH | 135000 |
| 313CH | 90000 | 34XBH | 115000 | 424*H | NA |
| 313DH | 120000 | 34XCH | 155000 | 42XBH | 150000 |
| 313EH | NA | 34XDH | 205000 | 42XCH | 180000 |
| 314*H | NA | 34XEH | NA | 431BH | 150000 |
| 31XBH | 100000 | 351BH | 90000 | 431CH | 150000 |
| 31XCH | 120000 | 351CH | 135000 | 433BH | 115000 |
| 31XDH | 160000 | 351DH | 160000 | 433CH | 150000 |
| 31WEH | NA | 351EH | NA | 434*H | NA |
| 321BH | 50000 | 535BH | 90000 | 43XBH | 175000 |
| 321CH | 75000 | 353CH | 135000 | 43XCH | 235000 |
| 321DH | 100000 | 353DH | 160000 | 441BH | 115000 |
| 321EH | NA | 353EH | NA | 441CH | 150000 |
| 322BH | 85000 | 354*H | NA | 443BH | 115000 |
| 322CH | 100000 | 35XBH | 130000 | 443CH | 150000 |
| 322DH | 135000 | 35XCH | 190000 | 444*H | NA |
| 322EH | NA | 35XDH | 240000 | 44XBH | 175000 |
| 323BH | 60000 | 35XEH | NA | 44XCH | 235000 |
| 323CH | 90000 | 361BH | 70000 | 451BH | 135000 |
| 323DH | 120000 | 361CH | 100000 | 451CH | 205000 |
| 323EH | NA | 361DH | 130000 | 453BH | 135000 |
| 324*H | NA | 361EH | NA | 453CH | 205000 |
| 32XBH | 100000 | 363BH | 70000 | 454*H | NA |
| 32XCH | 120000 | 363CH | 100000 | 45XBH | 195000 |
| 32XDH | 160000 | 363DH | 130000 | 45XCH | 285000 |
| 32XEH | NA | 363EH | NA | 461BH | 105000 |
| 331BH | 75000 | 364*H | NA | 461CH | 150000 |
| 331CH | 100000 | 366*H | NA | 462BH | 105000 |
| 331DH | 125000 | 36XBH | 110000 | 463CH | 150000 |
| 331EH | NA | 36XCH | 130000 | 464*H | NA |
| 333BH | 75000 | 36XDH | 170000 | 466*H | NA |
| 333CH | 100000 | 63XEH | NA | 46XBH | 165000 |
| 333DH | 125000 | 375*H | NA | 46XCH | 195000 |
| 333EH | NA | 411BH | 90000 | | |
| 334*H | NA | 411CH | 135000 | | |

The soil types listed below have one or more limiting characteristics that make the soil type "NA" or require on-site investigation, no matter what other characteristics of the soil may be present.

| <u>Soil Type</u> | <u>Minimum Lot Size</u> |
|------------------|--|
| 5***H | NA, poorly drain soil |
| 6***H | NA, very poorly drained soil |
| *75*H | NA, fill does not meet the Standards for Fill Material (see Key to Soil Types) |
| 76**H | On-site evaluation needed |

The Soil Type symbols are explained in the Key to Soil Types.

NA means not allowed

* means any slope or number

Minimum lot size interpretation is based on Table 1, page 226 of the Draft Water Quality Management Plan, Rockingham Planning Commission 208 Project and further evaluations.

D. ON-SITE INSPECTIONS

If deemed necessary, the Board may elect to visually inspect the property being subdivided. Under these circumstances, the developer may be asked to mark areas which promoted the on-site inspection.

E. RESERVE STRIPS OF LAND

Land, which in the opinion of the Board, shows an intent on the part of the subdivider to control access to land dedicated to be as public use shall not be a permitted use.

1. Handling of Land to be Dedicated

Areas set aside for parks and playgrounds to be dedicated or to be reserved for the common use of all property owners by covenant in the deed, whether or not required by the Board, shall be of reasonable size and character for neighborhood playgrounds or other recreational uses.

2. Requiring Land to be Dedicated

Where deemed essential by the Board, consistent with the Master Plan, upon consideration of the particular type of development proposed in the subdivision, and especially in large scale neighborhood unit development, the Board may require the dedication or reservation of such other areas or sites of a character, extent, and location suitable to the needs created by such development for public buildings, schools, parks and other neighborhood purposes.

F. PERCOLATION TESTS

In areas not currently served by public sewer systems, it shall be the responsibility of the subdivider or his agent to provide adequate information to prove that the area of each lot is adequate to permit the installation of an individual sewage system.

LOT SIZE BY SOIL TYPE CALCULATION

DATE _____

PROJECT NAME _____ TAX MAP # _____ LOT # _____

STREET NAME _____ DEVELOPER _____

OWNER (if different from developer) _____

Minimum Lot Size can contain up to 25% Group 5 soils Y _____ N _____

Soil Mapping reference _____

Ordinance Reference _____

| | 1 | 2 | 3 | 4 | 5 |
|-----------|-------------------|----------------------|-------------------------------------|--------------------------------|-----------|
| Soil Type | Soil Area (sf) | Group 5 Area (sf) | Group 6/ Ledge Soil Area (sf) | Min Area Req'd/ Lot (sf) | % Min Lot |
| | | | | | 1 4 |
| | | | | | |
| | | | | | |
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PART I

If 5 < 100% and 2 = 0, Upsize lot

If 5 ≥ 100% then go to Part III

If 5 < 100% and 2 > 0 then continue to Part II

PART II

1 5 = Composite Minimum Lot Size = _____

If 2 ≥ 25% composite minimum lot and < 1 ≥ 75% composite minimum lot, continue to Part III, if not, upsize lot.

If 2 < 25% composite minimum lot and 2 + 1 ≥ composite minimum lot, continue to Part III, if not, upsize lot.

PART III

1 + 2 + 3 = Total lot area shown = _____ or _____
(sf) (acres)

If total lot area shown is less than zoning requirements, then upsize lot.

VI. STREETS

A. GENERAL INFORMATION

1. No street name shall be used which will duplicate or be confused with any street name already in use.
2. Street names shall be subject to approval of the Board.
3. The arrangement, character, extent, width, grade, and location of all streets shall be considered in their relation to existing or planned streets, to topographic conditions, to public convenience and safety, and their appropriate relation to the proposed use of the land to be served.
4. Proposed streets shall conform, as far as practicable, to such Master or Study Plan as may be adopted, in whole or in part, by the Board prior to submission of a preliminary plan.
5. The arrangement of streets in a subdivision shall provide for continuation of principal streets in adjoining areas for their proper projection when adjoining land shall have been subdivided.
6. All streets in the subdivision shall be so designed that, in the opinion of the Board, they will provide safe vehicular travel while discouraging movement of through traffic.
7. Where a subdivision abuts or contains an existing or arterial street the Board may require marginal access streets, reverse frontage with screen planting contained in a non-access reservation along the rear property line, deep lots with rear service streets or other such treatment as may be deemed necessary for adequate protection for residential properties and to afford separation of through and local traffic.
8. Where a subdivision borders on or contains a railroad right-of-way, the Board may require a street approximately parallel to, and on each side of such right-of-way, at a distance suitable for the appropriate use of the intervening land, as for park purposes in residential districts, or for commercial or industrial purposes in appropriate districts. Such distances shall also be determined with due regard for approach grades and future grade separations.

9. Curbs and sidewalks shall be required in a subdivision when the average lot size is less than 43,560 square feet and curbs will be of granite stone and the sidewalk shall be five (5) feet wide minimum with a 6 inch gravel base and a 2 inch course of bituminous concrete covering. The area between the curb and the sidewalk will be a grassed area.
10. Where necessary, in the judgment of the Planning Board, sidewalks and/or rights-of-way (R.O.W.) for pedestrian travel and access may be required in subdivisions when the average lot size is one acre or larger, between subdivisions or its parts, or between a subdivision and public property.
11. In all proposed developments the applicant/developer shall provide all necessary street lighting, including poles and light fixtures. Lights will be located at locations approved by the Derry Public Works Department.
12. Prior to the Preliminary hearing the applicant/developer shall meet with the Derry Highway Safety Committee regarding the placement of Stop or Yield, and Speed Limit signs. It will be the responsibility of the applicant/developer to provide for and install any sign as necessary. All sign locations are subject to Derry Town Council approval.
13. In all proposed developments the applicant/developer shall provide for and install street name, Stop and Speed Limit signs, including size and color, per specifications and approval by the Derry Public Works Department standards.

B. HORIZONTAL ALIGNMENT

1. Street intersections shall have a minimum centerline offset of 200 feet.
2. Street intersections shall be designed to intersect at 90 degrees where conditions permit. No intersection shall be permitted where the angle of intersection is less than 80 degrees.
3. Curved streets shall have a tangent section at intersections. The minimum tangent length shall be as indicated in the Table of Geometric Standards. This requirement will be waived if the angle of approach is 80 degrees or greater at all points where the tangent would otherwise be required.

4. Whenever a street centerline has an angle point deflection of 10 degrees or greater, a horizontal curve shall be required. The minimum radius for horizontal curves is indicated in the Table of Geometric Standards.
5. Single access cul-de-sac streets shall not contain more than 30 dwelling units, nor be longer than 2,000 feet as measured from the centerline of the nearest through street to the the centerline radius point of the cul-de-sac.
6. Right-of-way lines at intersections and cul-de-sacs shall be rounded with a curve having a minimum radius of 25 feet. A great radius may be required if considered necessary by the Board.

C. VERTICAL ALIGNMENT

1. Street grades shall conform to those indicated in the Table of Geometric Standards.
2. Vertical curves shall be required at all locations where the change in grade is 1% or greater. Minimum length of vertical curve shall be determined by the formula $L = KA$, where L = length of vertical curve in feet, A = the algebraic difference in grade in percent, and K is the length of vertical curve per change in A . Values for K are listed in the Table for Geometric Standards.
3. At the proposed intersections the cross slope of the intersected street shall be extended a minimum of 10 feet past the typical width of pavement before introducing PVC of the profile of the intersection street. Further, from that point of PVC, the maximum grade for 75 feet shall not exceed two percent in accordance with Section VI, Streets, subsection E - Table of Geometric Standards.
4. Side slopes not steeper than 3 feet horizontal and 1 foot vertical shall be graded, loamed (4 inches compacted) and seeded. Side slopes in ledge areas shall not be steeper than 0.5 feet horizontal and 1 foot vertical.
5. Where, in the opinion of the Board, and where it has been demonstrated to the satisfaction of the Board by the subdivider that adherence to the maximum allowable road grade specified in the Table for Geometric Standards will cause excessive cuts and fills, a variance from the above specified maximum grade may be granted provided that:

- a. the maximum allowable grade is 8%
 - b. the maximum length of such grade, measured between vertical points of intersection (PVI) is 500 feet
 - c. no other such slope greater than 6% occurs within 500 feet measured along the centerline of the road from PVIs.
6. Slope easements shall be provided to the Town for maintenance of side slopes.

D. STOPPING SIGHT DISTANCE

1. All streets within a subdivision shall be designed to provide a stopping sight distance at all locations in accordance with the recommendations of the American Association of State Highway and Transportation Officials (AASHTO) as set forth in "A Policy on Geometric Design of Highways and Streets - 1984". An excerpt from Table III-1 of the foregoing document is set forth below for convenience:

| DESIGN SPEED MPH | MIN. STOPPING SIGHT DISTANCE FEET |
|---------------------|--------------------------------------|
| 20 | 125 |
| 25 | 150 |
| 30 | 200 |
| 35 | 225 |
| 40 | 275 |
| 45 | 325 |
| 50 | 400 |
| 55 | 450 |

2. The AASHTO recommendations are based on the height of the driver's eye at 3.5 feet above the road surface and the height of the object to be observed at 6 inches above the road surface. The 6 inch object shall be considered to be in the driveway; the driver's eye to be in a vehicle approaching the driveway.
3. Where a subdivision street intersects a proposed or existing street, the subdivision street shall be so located such that the foregoing stopping sight distances can be achieved from the point located 10 feet back from the edge of pavement of the intersected street.

4. Each lot within the subdivision shall be laid out such that a driveway for access to said lot can be located so that the foregoing stopping sight distances can be achieved from the proposed driveway intersection along the street.
5. To determine whether the foregoing stopping sight distance requirements have been met, the Preliminary Layout shall include plans and profiles of proposed and existing streets and driveways. Driveway locations may be modified at the discretion of the developer, provided that appropriate stopping sight distances shall be maintained. The plans and profiles called for by this paragraph shall be drawn to a scale of 1 inch to 50 feet horizontal and 1 inch to 5 feet vertical.
6. The applicant shall provide a certificate from a Licensed Land Surveyor or Registered Professional Engineer certifying that the above requirements have been met on the plans submitted to the Board for approval.
7. Sight distance easements shall be provided to the Town along horizontal curves and intersections in order to maintain the required sight distance requirements.
8. Guardrails shall be provided at all locations where the roadway embankment is 10 feet or greater from the top of a 3:1 slope to the bottom of the embankment. Guardrails will not be required where the embankment has a side slope not steeper than 4 feet horizontal to 1 foot vertical.

E. TABLE OF GEOMETRIC STANDARDS (Streets)

| | Arterial | Collector | Minor |
|--|----------|-----------|-------|
| 1. Minimum R.O.W. Width | 80' | 66' | 50' |
| 2. Minimum angle of intersection | 80° | 80° | 80° |
| 3. Min. tangent length at intersections & between reverse curves | 300' | 200' | 100' |
| 4. Minimum centerline radius | 800' | 510' | 275' |
| 5. Cul-de-sacs | | | |
| a. Maximum length | N/A | | 2,000 |
| b. Min radius of R.O.W. at closed end | N/A | | 75' |
| c. Min radius of pavement at closed end | N/A | | 62' |
| d. Min pavement width at closed end | N/A | | 24' |
| 6. Minimum Street Grade | | | |
| a. with open drainage system | 1% | 1% | 0.5% |
| b. with enclosed drainage system | 1% | 1% | 1% |
| 7. * Maximum Street Grade | 4% | 6% | 6% |
| a. with open drainage system | 3% | 3% | 3% |
| b. with enclosed drainage system | 4% | 6% | 6% |
| 8. ** Maximum grade w/i 75' of intersect | 2% | 2% | |
| 9. Minimum K value for vertical curves | | | |
| a. Crest vertical curves | 85 | 55 | 30 |
| b. Sag vertical curves | 75 | 55 | 40 |
| 10. Pavement | | | |
| a. Minimum width | 42' | 36' | 24' |
| b. Minimum cross slope | 2% | 2% | 2% |
| c. Maximum cross slope | 3% | 3% | 4% |
| d. Minimum road sub-base (Bank Run Gravel) | 12" | 12" | 12" |
| e. Minimum road base (crushed gravel) | 6" | 6" | 6" |
| f. Minimum bituminous concrete base course | 2" | 2" | 2" |
| g. Minimum bituminous concrete wearing course | 2" | 2" | 2" |
| 11. Minimum width of shoulders | 8' | 6' | 4' |
| 12. Sidewalks (where required) | | | |
| a. Minimum width | 6' | 5' | 5' |
| b. Minimum gravel base course | 8" | 8" | 8" |
| c. Minimum bituminous concrete surface | 3" | 3" | 3" |

N/A = Not Allowed

* - Subject to Public Works Department Review

** - See Section VI - Subsection C(3)

VII. PARKING LOTS

Off-street parking shall be provided for all development of tracts of land for non-residential and multi-family units in the Town of Derry.

A. SETBACK REQUIREMENTS

All parking spaces, service or delivery spaces, aisles and access ways shall be a minimum of 15 feet from boundary lines of public streets and highways or other public property.

All parking spaces and all service or delivery spaces, aisles and access ways shall be a minimum of 10 feet from all other property lines.

B. DIMENSIONS

All aisles and access ways shall be a minimum of 24 feet wide. Standard parking spaces shall be 10 feet wide and 18 feet long. Handicapped parking spaces shall be 12 feet wide and 18 feet long. Adequate backing and turn around space shall be provided in all parking areas.

C. LANDSCAPING

A curbed, raised and landscaped island, a minimum of 15 feet in width, shall be provided when parking spaces, service or delivery spaces, aisles and access ways abut the boundary lines of public streets and highways or other public property.

A curbed, raised and landscaped island, a minimum of 10 feet in width, shall be provided to separate parking spaces from parking lot drives and access ways, and shall also be provided as a separation between groups of no more than 20 spaces along each side of each aisle.

Landscaping shall conform to Section IV.D of these Regulations.

D. MARKINGS

All parking spaces, service and delivery areas, and access lanes be clearly marked using durable materials. Spaces for handicapped parking shall be clearly marked using the international symbol for handicapped parking.

E. NUMBER OF SPACES

The total number of parking spaces for each development shall be determined from the table below.

| USE | # OF SPACES |
|--|---|
| 1. Single family dwelling | 2 spaces per unit |
| 2. Multi-family dwelling | |
| a. One bedroom | 2 spaces per unit |
| b. Two bedroom | 2.5 spaces per unit |
| c. Three or more bedrooms | 3 spaces per unit |
| 3. Office buildings | 1 space per 200 sf of floor space |
| 4. Hotels, motels & inns | 1.5 spaces per room plus 1 space per 20 sf available for meetings, conferences and banquets |
| 5. Restaurants | |
| a. Carry-out variety | 1 space per 50 sf of floor area plus 1 space per employee |
| b. Eat-in variety | 1 space per 3 seats plus 1 space per employee |
| c. Combined carry-out, eat-in | A combination of (a) & (b) above shall be used. The floor area for carry-out shall be everything except those areas used specifically for the seating of customers. |
| 6. Retail sales | 1 space per 150 sf of gross floor space plus 1 space per employee. |
| 7. Industrial/warehouse | 1.1 spaces per employee plus 1 space per 200 sf of floor space used for offices. For two or more shifts, the number shall be doubled. |
| 8. Theatres, churches and convention centers | 1 space for every 3 seats plus 1 space for each employee. |

NOTES:

1. For uses not specifically listed, a minimum of 1 space for every 200 sf of floor area shall be provided.
2. A minimum of 4 spaces per 100 shall be designated and marked for handicapped parking with a minimum of 2 handicapped spaces for each use (i.e., 3 retail stores shall provide a minimum of 6 handicapped spaces).
3. When computing the number of spaces for employees, a minimum of 3 employees per use shall be used.

F. PAVEMENT STANDARDS

All parking spaces, service or delivery spaces, aisles and access ways shall have a minimum gravel base course 12 inches thick. The surface may be either bituminous concrete with a minimum thickness of 3 inches, or portland cement concrete with a minimum thickness of 6 inches.

VIII. SANITARY SEWER

A. LOCATION

Sanitary sewer and manholes shall be located on the north and east sides of public right-of-way where possible, and shall conform to sections WS 1008.01, WS 1008.02 and WS 1008.03 of the New Hampshire Code of Administrative Rules, latest edition.

B. DESIGN

1. The applicant shall provide written copies of all approved for the proposed sanitary sewer system.
2. Calculations shall be performed for all new sanitary sewers and shall include flow analysis showing the effect of the proposed sewer on the existing system outside of the area of the subdivision. All sanitary sewers shall be designed based on the New Hampshire Code of Administration Rules Standards of Design for Sewerage and Water Treatment Systems with the following exceptions:

- a. The minimum slope for 8 inch sanitary sewer shall be not less than 0.005 feet per foot.
 - b. Sanitary sewer services shall be a minimum of 6 inch diameter and shall have a minimum slope of 0.01 feet per foot.
 - c. Manholes shall be spaced no more than 300 feet apart.
 - d. Sanitary sewer and manholes shall be constructed of materials as specified in the Town of Derry Construction Requirements for Sanitary Sewer, latest edition.
3. If it is determined that a proposed sanitary sewer may be extended in the future, the future capacity shall be calculated and used to determine the design slope.

IX WATER MAIN

A. LOCATION

Water main shall be located on the south and west sides of public right-of-way where possible. Minimum depth shall be 5 feet to prevent damage from freezing.

B. DESIGN

Prior to adding to the Town of Derry water system, the applicant shall meet with the Director of Public Works to determine the design requirements necessary for the particular project. The applicant shall provide the calculations that the proposed and existing water supply systems meet the requirements and have been approved by the Public Works Director.

Hydrants shall be located so that the arc of a 500 foot radius from the hydrant extends not less than 200 feet into each lot. Each hydrant must provide an adequate flow of water as recommended by the Derry Department of Public Works.

C. COMMUNITY SYSTEM

Proposed community system shall be designed and constructed to Town of Derry standards, latest edition. Community systems shall be owned by the Town of Derry.

D. MATERIALS

Water mains and appurtenances shall be constructed of materials as specified in the Town of Derry Construction Requirements for Water Main.

X. STORM DRAINAGE

A. DESIGN

1. Storm drainage systems shall be designed using the storm return frequency as follows:
 - a. Single family residential - 10 year frequency
 - b. Multi-family residential, commercial & industrial - 25 year frequency
 - c. Flood protection works - 50 year frequency
2. The rate of stormwater runoff from the development under post-developed conditions shall not exceed that of the pre-developed conditions.
3. The maximum distance of overland flow along roadways shall not exceed 400 feet.
4. If, in the opinion of the Board, there is a possibility of injury to persons or to property, the Board may require the applicant to use a storm return frequency greater than herein required, but not more than a 100 year frequency.
5. The drainage calculations shall include flow analysis showing the effect of a subdivision on the existing drainage facilities outside of the area of the subdivision. Where the Board anticipates that the additional runoff incident to the development of the subdivision will overload an existing downstream drainage facility so that there will be damage to private property or an increase in the expenditure of public funds, the Board shall not approve the subdivision until adequate provision is made, at the subdivider's expense, for all downstream drainage.

B. CALCULATIONS

1. All calculations used for the design of the storm drainage system shall be by currently recognized best engineering methods and practices.
2. Calculations shall be for both pre-developed and post-developed conditions and shall include times of concentration, runoff coefficients or curve number, maximum rate of runoff, total amount of runoff, storm sewer and drainage ditch sizing, culvert sizing for all roadway and driveway crossings, retention/detention facilities, and other information as may be required by the Board or Town Engineer.
 - a. All storm sewers shall be designed to have a minimum velocity of 3 feet per second and a maximum velocity of 10 feet per second based on storm drainage design.
 - b. All open ditches and swales shall be designed to have a minimum velocity of 1 foot per second and a maximum velocity of 10 feet per second. All open ditches and swales shall be designed in accordance with □Design of Stable Channels With Flexible Linings□, Hydraulic Engineering Circular No. 15, published by the U.S. Department of Transportation, October 1975.
 - c. Suitable methods and calculations shall be used to design erosion control methods for use with all storm drainage systems. Such methods shall include but not be limited to: headwalls or end sections for all inlets and outlets, bedded riprap for drainage ditches that exceed a velocity of 3 feet per second, slope mattresses or placed boulders for steep side slopes and revegetation.

C. MINIMUM PIPE SIZE AND COVER

Minimum pipe size shall be 12 inches in diameter for privately maintained storm drainage systems and 15 inches in diameter for publicly maintained storm drainage systems. The minimum depth of cover from the road or ground surface to the crown of the pipe shall be not less than 3 feet.

D. MATERIALS

Storm sewer and appurtenances shall be constructed of materials in accordance with the standards set by the Public Works Department for the construction for Storm Sewer.

XI. OTHER UTILITIES

In all proposed developments or activities, related thereto, which are before the Derry Planning Board for approval, electric, telephone, cable, and other utility distribution lines shall be installed underground per specifications of the utility companies involved, and there shall be provided by the developer such easements as are required for those utilities and transformer units. Both the landscaping and the location of such transformer areas shall be as approved by the Planning Board. Detailed plans for all underground transmission or utility lines shall be supplied to the Public Works Department prior to installation, and "record" drawings, sealed by a Registered Professional Engineer, or Licensed Surveyor, shall be supplied to the Public Works Department and utility companies following installation and prior to release of escrow.

PART 3 - CONSTRUCTION REQUIREMENTS

XII. GENERAL INFORMATION

A. PROSECUTION OF WORK

All construction within new developments shall be performed in accordance with the plans, profiles, typical sections and details approved by the Board and the requirements contained herein. Changes or revisions to said plans, profiles, typical sections and details caused by unanticipated conditions encountered during construction shall be designed by the applicant's engineer and shall be subject to the approval of the Town Engineer and the Board.

All items of work shall be constructed in conformance with all codes, ordinances, specifications and regulations adopted by the Town. Any item of work for which there are no specifications contained herein shall conform to the current Specifications For Road and Bridge Construction of the State of New Hampshire Department of Public Works and Highways.

B. CONSTRUCTION MONITORING

All construction within new developments shall follow the procedures as set forth in the Construction Monitoring Procedures and Checklist, published by the Derry Department of Public Works, latest edition.

SECTION XIII - FIRE PROTECTION (New Section-Adopted 10/9/96)

- A. Fire Hydrants - Any development occurring within 1,000 feet of an existing municipal water main shall extend the system to provide fire hydrants for fire protection purposes. All water mains and fire hydrants shall be installed in accordance with the requirements of the Director of Public Works. In the event that the Director of Public Works deems the extension of the water main technically unfeasible, the developer will be required to install a fire cistern as required below.
- B. Fire Cisterns - Any development occurring outside the municipal water system by a distance greater than 1,000 feet shall provide water for fire protection purposes through the use of fire cisterns. The size, location and specification of the fire cistern shall be in accordance with the requirements of the Fire Department. The developer will be required to present a statement from the fire department which indicates compliance with this provision.

FIRE CISTERN SPECIFICATION

1. Cisterns shall be located not more than 1,000 feet travel distance from the nearest lot of the furthestmost lot.
2. The design of the fire cistern shall be trouble-free and last a lifetime.

3. The cistern capacity shall be calculated in accordance with Chapter 5, of the most recent edition of Standard 1231 of the National Fire Protection Association (NFPA).
4. The suction piping system shall be capable of delivering 1,000 gallons per minute, for three quarters (3/4) of the cistern's rated capacity.
5. The design of the fire cistern shall be submitted to the Fire Chief for approval prior to construction. All plans must be signed by a professional engineer.
6. The entire fire cistern shall be rated for highway loading unless specifically exempted by the Fire Chief.
7. All drawings are for estimation purposes only and are not intended for use as design.
8. Each cistern shall be sited to the particular location by a professional engineer and approved by the Fire Chief.
9. Cast-in-place concrete shall achieve a 28-day strength of 3,000 psig. It should be placed with a minimum of 4 inch (4") slump and vibrated in a professional manner.
10. The concrete shall be mixed, placed and cured without the use of calcium chloride. Winter placement and curing shall follow the accepted American Concrete Institute (ACI) Codes.
11. All suction and fill piping shall be American Society for Testing and Material (ASTM) Schedule 40 steel. All venting shall be ASTM Schedule 40 PVC with glued joints.
12. All PVC piping shall have glued joints
13. The suction connection shall be a minimum of 4.5 inches in diameter, with National Standard Thread (NST) and provided with a suitable cap.
14. The filler siamese connection shall have two, 2.5 inch, NST female connections with suitable plugs.
15. The entire cistern shall be completely piped and inspected prior to any backfilling being accomplished.
16. All backfill materials shall be screened gravel with no stone larger than 1.5 inches and shall be compacted to 95% ASTM 1557.
17. Bedding for the cistern shall consist of a minimum of 12 inches of .74 to 1.5 inch, crushed washed stone, compacted. No fill shall be used under the stone.
18. The filler pipe siamese shall be 36 inches above the final grade.
19. The suction pipe connection shall be between 20 and 24 inches above the level of the grade where the vehicle wheels will be located when the cistern is in use.
20. The cistern shall be designed and installed so it will not float when empty.

21. Suction piping shall be supported either on top of the tank or to a level below the frost line.
22. Perimeter of the tank at the floor/wall joint shall be sealed with 8 inches of PVC waterstop.
23. After backfilling, the cistern shall be protected by fencing or large stones.
24. Backing over the tank shall be:
 - Four (4') feet of fill; or
 - The top and highest two (2') feet of the cistern shall be insulated with vermin resistant foam insulation, and two (2') feet of fill.
 - Backfill shall extend ten (10') feet beyond the edge of the cistern and then have a maximum 3:1 slope, loamed and seeded.
25. The bottom of the suction pipe to the pumper connection shall not exceed fourteen (14') vertical distance.
26. The pitch of shoulder and vehicle pad from edge of pavement to pumper suction connection shall be one (1%) percent to six (6%) percent downgrade.
27. The shoulder and vehicle pad should be of a sufficient length to permit convenient access to the suction connection when the pumper is set at 45 degrees to the road.
28. The suction pipe connection shall terminate not more than 22 to 24 feet from the edge of the pavement.

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